NOTES AND DESCRIPTIONS, AMERICAN NOTODONTIDÆ

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The notes and descriptions in this paper are the result of rearrangement of certain groups in the National collection. One genus and seven species of American moths are described as new and the synonymy of four other species is discussed.

Ianassa pinalensis Benjamin, n. sp.

Head and thorax clothed with white and black scales. Fore wing blackish, basally tinged with rufous, suffused with white in region of cell and submedian fold, with a white patch distal to the dark discocellular patch; veins marked with black; black basal dash present; a black subterminal series of dashes between the veins, these dashes more or less defined by white, the dash above tornus being the heaviest; fringe dusky with paler interline, partly tipped with white. Hind wing hyaline white with some black scales on anal angle and tinging veins 2, 3, and 4; fringe pale, tinged with some few fuscous scales, except toward anal angle where the fuscous is intensified. Beneath white, tinged with black especially along the veins, the costal and distal regions of the fore wing, and the costal region and anal angle of the hind wing.

Expanse: 37 mm.

Holotype. Cat. No. 43,677, U. S. N. M.

One &, Pinal Mountains, Arizona, elevation 5,000 feet, 15-22 May, 1925 (O. C. Poling).

Ianassa delicatoides Benjamin, n. sp.

Head and thorax dull black and white mixed. Fore wing dull black, marked with black and white; basal dash, veins, discal dot, diffused median shade, subterminal dashes strongest above tornus, all black; t. p. line black, irregular, dentate, geminate, filled with whitish scales; subterminal dashes more or less defined by white; fringe fuscous, with paler interline. Hind wing hyaline white, veins more or less tinted with fuscous, which shade is more or less emphasized along costa and at anal angle. Beneath: fore wing whitish powdered with fuscous; hind wing much as on upper side.

Expanse: 46 mm.

Holotype. Cat. No. 43,677, U. S. N. M.

One &, Santa Catalina Mountains, Arizona, September.

Ianassa alpica Benjamin, n. sp.

Head and thorax powdered with black scales and suffused with pale violaceous and white. Fore wing ochraceous powdered with black scales above submedian fold, suffused with violaceous white throughout the same region, the white emphasized as surrounding the discal black dot, at apex, along vein 5, and as a streak interrupting the obsolescent t. p. line between veins 5 and 6; median shade dull fuscous, poorly defined; t. p. line poorly defined except in the region of the tornus where it is irregular, oblique, geminate; basal black dash present; a black patch at tornus interrupted by a subterminal white crescent; the ordinary black s. t. streaks poorly indicated; fringe ochreous, interlined paler, checkered by black at the tips of the veins. Hind wing hyaline white with a slight powdering of black along costal region and at anal angle; fringe nearly pure white, faintly luteous basally. Beneath: fore wing white, powdered with black, especially along costal and outer margins; hind wing much as on upper side; fringes of all wings much as on upper side. *Expanse:* 40-42 mm.

Expanse: 40-42 mm.

Holotype 3, 4 3 paratypes, 1-7 April, 1-7 June, 8-14 September, all 1926, Alpine, Texas (O. C. Poling), Cat. No. 43,683, U. S. N. M.

Schizura paradisus Benjamin, n. sp.

Head and thorax dull black and white mixed. Fore wing dull black marked with black, luteous, and white; basal dash, veins, discal dot, obsolescent median shade, subterminal dashes strongest above tornus, all black; t. p. line black, irregular, dentate, geminate, obsolescent above vein 4, filled with whitish scales; subterminal dashes more or less defined by whitish; a small luteous, white patch near apex; a large luteous, white terminal patch between veins 2 and 4; fringe luteous, underlined paler, interrupted by black scales, especially at tips of veins and at tornus. Hind wing hyaline white, the veins more or less tinged with a few fuscous scales, especially terminally; powdered with fuscous along costal region and with a strong fuscous patch at anal angle; fringe white, defined basally with pale luteous, with black at anal angle and a few black scales at the tips of veins 2 and 3. Beneath: fore wing white, more or less powdered with black scales which are emphasized along the costal region; hind wing much as on upper side.

Expanse: 43 mm.

Holotype. Cat. No. 43,684, U. S. N. M. One &, Paradise, Cochise County, Arizona.

Litodonta (?) alpina Benjamin, n. sp.

The present species does not fully agree with the genotype of *Litodonta*, veins 7, 8, and 9 being stalked and 10 shortly stalked from the accessory cell of fore wing, the antennæ with long pectinations decreasing toward the tip, the last six joints not pectinated.

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Fore wing dull fuscous brown, irrorated with black and violaceouswhite scales; basal line black, from costa to vein 1, distally defined by violaceous-white; s. t. and t. p. lines obsolescent, irregular but nearly erect, indicated by a series of powdery black scales; reniform thin, bar-like, erect, black; a diffused subterminal fuscous shade line appearing as if composed of obscure sagittate black dashes distally fused; terminal line black, thin; veins more or less marked by either black scales or violaceous-white scales; fringe dull ochreous faintly interlined and checkered by black. Hind wing dull fuscous-brown, paler basally, tending to have a deeper fuscous-brown terminal line; fringe fuscous-brown checkered with blackish. Beneath: dull sordid white powdered with fuscous, especially upon costal and outer areas of fore wings and along the outer margins of the hind wings; fringes checkered.

Expanse: 42 mm.

Holotype, 2 & paratypes. Cat. No. 43,814, U. S. N. M. Three & &, Alpine, Texas, 1-7 July, 1-7 August, 22-31 August, 1926 (O. C. Poling).

Præschausia Benjamin, n. g.

Type: Kalkoma zapata Schaus.

Male antennæ pectinate to tips, female antennæ simple, scarcely ciliated. Palpi very short, upcurved, the third joint short and scarcely visible. Tongue extremely short. Legs hairy, except the tarsi. Eyes large and rounded. Frons less than half the width of the eye, with central scale tuft. Mesothorax with strong patches of broad metallic scales appearing as tufts. Abdomen with slight tuft at base (this tuft often lost). Fore wing: vein 2 from two-thirds out on discal cell; 3 and 4 from near lower angle; 5 from above middle of discocellulars; 6 from accessory cell near discal cell; 7 from near tip of accessory cell; 8 and 9 stalked from tip of accessory cell; 10 from near tip of accessory cell; 11 from about two-thirds out on discal cell; accessory cell extremely long and narrow, about the length of vein 7 and longer than 8, 9, or 10. Hind wing: vein 2 from about two-thirds out on cell; 3 and 4 from near lower angle; 5 from near middle of discocellulars; 6 and 7 stalked from upper angle; 8 parallel with cell to near its end, thence sharply divergent.

Named in honor of Dr. William Schaus.

PRÆSCHAUSIA ZAPATA Schs.

A pair of this species are in the Barnes series from Baboquivari Mountains, Pima County, Arizona, 1-15 August and 15-30 September, 1924 (O. C. Poling). The type locality is Presidio River, Sinaloa, Mexico.

Heterocampa belfragei Grt.

A single male specimen is in the National collection and agrees with a figure received with the Barnes collection, of the type male in the British Museum. This is not the same as the male of *masta* Schs. (see B. and Benj., 1924, Contrib. N. H. Lep. N. Am., V, (3), 180).

The correct synonymy for the latter species appears to be edwardsi Druce \ddagger mucosa Hy. Edw. nec Moschl. = masta Schs. Types of muscosa Hy. Edw. and masta Schs. are in the National Museum, while the name edwardsi was proposed by Druce as a straight nom. nov. to rectify a homonym, hence has as type the type of muscosa.

HETEROCAMPA PICTA Feld.

= astarte Dbldy. = menas Harris = chapmani Grt.

Form PEROLIVATA Pack.

The name *picta* Felder was applied to a female specimen said to come from the Amazon. No closely related South American species is known and the name has been generally included in North American lists. Four similar species are known from the United States, of which *simulans* B. and Benj. from Iowa and *rufinans* Dyar from Colorado may be omitted from discussion. Of the other two the name *picta* was applied to a Florida species in the National collection, while the name *astarte* was applied to a Texas species. The Barnes collection had these names reversed, so that *picta* was applied to the Texas, and *astarte* to the Florida species.

Figures of types astarte and chapmani are before the author and represent, respectively, male and female of the Florida species; the name menas is simply another name for astarte, and Felder's figure, although rather poor, seems to represent a female specimen of the same species. Packard's type of perolivata is a runty bred male from Fort Monroe, Virginia, with whiter hind legs and more olivaceous fore wings than typical picta. Possibly the name may represent a lower austral race of picta rather than a mere color form.

To the "astarte" of the National Museum, Brooklyn Institute, and Cambridge collections, and the "picta" of the Barnes collection, the following name is applied.

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Heterocampa astartoides Benjamin, n. sp.

Male. Head and thorax pale olive green powdered with black, often appearing grayish. Fore wing with ground color olive green powdered with black; basal half-line black, interrupted at the black basal dash, other obscure basal lines present; t. a. line black, geminate, nearly erect; reniform an elongate, thin black crescent powdered and crossed by median obscure black shades; t. p. line black, geminate, dentate, outwardly oblique at costa, slightly incurved near cell, thence obliquely incurved to the inner margin; s. t. line mainly as a strong dark shade, heaviest opposite a whitish subapical patch between said line and the t. p.; terminal line thin, irregular, black. Hind wing nearly pure hyaline white with some black scales along costa and a black dot at anal angle. Beneath: white with black powdering, especially along the costa and terminally on the fore wing, and along costa of the hind wing which possesses the black dot in the anal angle as on upper side.

Female similar to the male, except tending to have the fore wings more olivaceous; the hind wings with their veins and distal margins suffused with fuscous, and with more or less obsolescent fuscous median shades.

Holotype δ , allotype φ , 9 δ , 13 φ paratypes. Cat. No. 43,815, U. S. N. M. Ten $\delta \delta$, 14 $\varphi \varphi$, the holotype from Shovel Mountain, VII, 12, the allotype from the same locality; paratypes from San Antonio, Shovel Mountain, Kerrville, and unknown Texas localities.

Note: The male genitalia of *astartoides* and *picta* differ mainly in the shape and dentation of the socii. The author would be inclined to consider that only geographical races were involved were it not for the fact that the t. a. line is nearly erect in *astartoides* and decidedly oblique in *picta*.

HETEROCAMPA OBLIQUA Pack.

A specimen compared by the author with types *trouveloti* Pack. (at Cambridge) and *brunnea* G. & R. (Amer. Mus.) indicate that these names apply to the normal females of the same species described as *obliqua* Pack., the type of the last mentioned also having been compared by the author (at Cambridge).

The name *varia* Wlk., of which there is a specimen in the Barnes material, compared with the Walker type and labeled "exact J. McD.," takes priority over the names *georgiana* Dyar and *baryspus* Dyar (types in U. S. N. M.).

Heterocampa secessionis Benjamin, n. sp.

Superficially similar to *obliqua* in size and markings; the fore wings darker, lacking luteous shadings; the hind wings of the males lacking fuscous shading along the inner margins.

The genitalia of *secessionis* and *obliqua* are different. In the former, as contrasted with the latter, the ædœagus is smaller, its armature reduced to about one-third; the socii are smaller, less evenly curved, and with different dentation.

Holotype &, allotype Q, & &, 4 Q paratypes. Cat. No. 43,816, U. S. N. M., Alpine, Big Bend, Texas, various dates, June to September.

A DEFOLIATING NOCTUID

The ash (*Fraxinus oregona*) over large areas in Douglas County, Oregon, was almost completely defoliated in early May, 1931, and the caterpillars of the second brood were abundant the second week of July. The caterpillars eat the more tender part of the leaves, leaving the mid-ribs and the lateral veins. When full grown they descend to the ground and pupate under the soil.

The moths were identified by Mr. F. H. Benjamin as *Homohadena fortis picina* Grote. There seems to be no record in economic literature mentioning this species.—W. J. Chamberlin, Forest Entomologist, Oregon State College.

DIPLOIULUS LUSCUS (MEINERT) IN CALIFORNIA

Professor R. V. Chamberlin places this name on certain small Millipeds which were collected in Sacramento early in November 1931. This Arthropod is very common around Capitol Park, and elsewhere in the city. Professor Chamberlin writes that this species is a native of Europe which is common in cultivated areas, but is uncommon, even in Europe, where the soil is not cultivated. Its economic status is in doubt, but it has been observed entering houses in large numbers. On several occasions, during sunny winter days, thousands of individuals have crawled up on the warm sides of the Capitol buildings.— H. H. Keifer, Sacramento.